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Particular patents—Sulfide Oxide Acceptors
Naber and Dautzenberg, Process for Regeneration of Sulfide Oxide Acceptors, claims 1 to 6, 8 to 10, 12, and 13 of application allowed.

Appeal from Board of Appeals of the Patent Office.
Application for patent of Jaap E. Naber and Fritz M. Dautzenberg, Serial No. 842,025, filed July 15, 1969; Patent Office Group 113. From decision rejecting claims 1 to 6, 8 to 10, 12, and 13, applicants appeal. Reversed.

LEONARD P. MILLER for appellants;
JOSEPH F. NAKAMURA (ROBERT D. EDWARDS of counsel) for Commissioner of Patents.

Before MARKEY, Chief Judge, and RICH, BAUDWIN, LANE, and MILLER, Associate Judges.

MILLER, Judge.

This is an appeal from the decision by the Patent Office Board of Appeals affirming the examiner's rejection under 35 U.S.C. 103 of claims 1-6, 8-10, 12, and 13—all the claims in application serial No. 842,025, filed July 15, 1969, for "Process for Regeneration of Sulfur Oxide Acceptors." We reverse.

The Invention

Sulfur oxides are removed from gas mixtures, such as flue gases and gases originating from roasting processes, by contact with metal or metal oxide acceptors, such as copper or copper oxide, on a refractory carrier material (e.g., alumina). During contact, sulfur oxides are accepted by the copper or copper oxide, so that the purified gases, if discharged via a stack, cause substantially no air pollution. The copper sulfate formed during acceptance may be subsequently decomposed by means of a reducing gas, the result being a regenerated acceptor and a sulfur dioxide-rich gas, which can be used, for example, to produce elemental sulfur or sulfuric acid. The regenerated acceptor can then be reused to purify a further quantity of gas containing sulfur oxides.

Suitable reducing gases for regenerating such supported metal acceptors include hydrogen, carbon monoxide, and methane. Higher molecular weight hydrocarbons, such as propane and butane, can also be used as the reducing gas; however, according to appellants, these form combustible deposits on the acceptor during the regeneration process. The combustible deposits are undesirable since their combustion during use of the regenerated acceptor causes a significant increase in temperature which adversely affects the acceptor

life. The primary objective of the invention is to provide a process in which only minor quantities of combustible material are deposited on the acceptor.

The combustible deposits can be significantly decreased if the higher molecular weight hydrocarbon reducing gas is mixed with an inert diluent, such as steam, in a volume ratio to the hydrocarbon of 0.2:1 to 20:1. This decrease is demonstrated in appellants' specification by the reduced temperature increase during reuse following regeneration with the claimed diluted hydrocarbons compared to that which occurred when regeneration was effected with undiluted hydrocarbons.

In addition, it is disclosed that the inert diluent has no appreciable effect on the amount of hydrocarbon required for regeneration of metal acceptors so that the regeneration (based on the sulfur dioxide content of the spent reducing gas) for undiluted hydrocarbons and the claimed diluted hydrocarbons is substantially the same.

Claim 1 is representative:

1. A process for the regeneration of a sulfur oxide-loaded acceptor obtained by contacting a sulfur oxide- and oxygen-containing gas mixture with a solid acceptor of a solid refractory carrier material composited with a metal or a metal compound capable of taking up sulfur oxides, which comprises treating said loaded acceptor at a temperature of 200°C to 500°C with a reducing gas comprising an inert diluent and a hydrocarbon in a volume ratio of 0.2:1 to 20:1, said hydrocarbon having at least three carbon atoms per molecule, and removing a sulfur dioxide-containing spent reducing gas.

Opinion

The referenced patent to Van Helden et al. (Van Helden) discloses a metal acceptor regeneration process employing a hydrocarbon reducing gas, such as propane or butane. There is no indication that combustible deposits are encountered when employing such heavier hydrocarbon reducing gases as propane or butane. Although not expressly disclosed, a small portion of inert diluent (steam) will necessarily be present during regeneration as a result of the disclosed partial combustion of the reducing gas.² Herein lies a critical difference from the claimed invention which requires a higher amount of inert diluent (steam) to be mixed with the reducing gas.

¹ U.S. Patent 3,501,897, issued March 24, 1970, on an application filed November 20, 1967.

² The precise amount of the steam present in Van Helden is not clear from the record, but it was tacitly assumed below that it is considerably lower than the claimed minimum of inert diluent, which, in a volume ratio to the hydrocarbon of 0.2:1, is approximately 16:68.

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ference from the claimed invention which expressly requires a higher amount of inert diluent (steam) to be mixed with the reducing gas.

The referenced British patent³ discloses a regeneration process for carbon acceptors employing a lower aliphatic hydrocarbon reducing gas, such as methane. It is stated that the addition of 1% by weight of steam raises the regeneration rate; that test data show addition of about 10% wettes the regeneration rate. The steam may be generated in situ by partial combustion of the reducing gas or added as such.

[1] The position of the Patent Office is that one of ordinary skill in the art at the time appellants' invention was made would be led to such invention by adding steam, as taught by the British patent (carbon acceptors) to the regeneration process of Van Helden (metal acceptors) in order to increase the rate of regeneration, sulfur compounds being reduced during regeneration in both processes. Although this court has referred to a similar combination of references as a "prima facie case," we believe it more precise here to say that the difference between carbon acceptors, which operate by a process of physical adsorption and are regenerated by a process of desorption, and metal acceptors, which utilize a chemical reaction during both the accepting and regenerating phases, is such as to cast doubt on the Patent Office position. As in the case of so-called "secondary considerations," such as commercial success and superior results, all evidence before the Patent Office is to be considered in resolving that doubt. *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966); *In re Tiffin*, 58 CCPA 1277, 443 F.2d 394, 170 USPQ 88 (1971); *In re Lindell*, 55 CCPA 707, 385 F.2d 453, 155 USPQ 521 (1967).

It is to be noted that the only motivation presented by the Patent Office, and the only one readily apparent for modifying Van Helden according to the teachings of the British patent is the latter's demonstration of an increased regeneration rate accompanying an increase in the amount of steam. However, the evidence in appellants' specification, namely, data which show that use of steam has no appreciable effect on the rate of regeneration of metal acceptors, demonstrates that the motivation advanced by the Patent Office is misplaced.

³ No. 1,045,610, published October 12, 1966. Other references were cited by the Patent Office to justify the rejection, but their consideration is unnecessary since they are merely cumulative.

⁴ See *In re Pearson*, 59 CCPA 708, 463 F.2d 640, 171 USPQ 693 (1971). *In re Kinske*, 59 CCPA 862, 455 F.2d 1077, 173 USPQ 14 (1972).

Moreover, the record contains no evidence that those skilled in the art were aware of the problem of combustible deposits, the solution to which is the primary objective of appellants' invention. Therefore, even if one of ordinary skill in the art were moved to combine the references, there would be no recognition that the problem of combustible deposits had been solved. Having sought an increased regeneration rate for metal acceptors without success, the experiment would be deemed a failure, without recognizing that another problem had been solved.

Accordingly, we hold that the references do not render obvious the claimed invention as a whole for purposes of 35 U.S.C. 103 and reverse the decision of the board.

Court of Customs and Patent Appeals

In re Pearson

No. 9226 Decided Apr. 25, 1974

PATENTS

1. Patentability — Invention — In general (§31.501)

Court has sanctioned practice of nominally basing rejections on 35 U.S.C. 103 when, in fact, actual ground of rejection is that claim are anticipated by prior art; justification for sanction is that lack of novelty, e.g., as evidenced by a complete disclosure of invention in prior art, is epitome of obviousness.

2. Court of Customs and Patent Appeals — Issues determined — Ex parte patent cases (§39.203)

Although rejection finds statutory basis in 35 U.S.C. 103, one ground for rejection is that claims do not define novel subject matter; court adopts solicitor's suggestion that case be remanded by first determining whether claims define novel subject matter and, if on more do, then determining whether either obvious subject matter is set forth, if only ground for rejection under section 103 has been that claims are anticipated, it would be

⁵ Invalidity of motivation was not present in *In re Graham*, 54 CCPA 1066, 372 F.2d 535, 152 USPQ 602 (1967), cited by the solicitor during oral argument, so that the experiment there would not have been deemed a failure, and the "inherent" solution to the problem of unsatisfactorily low reduction in dental enamel solubility was actually achieved. See *In re Murch*, 59 CCPA 1277, 464 F.2d 1051, 175 USPQ 89 (1972).

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improper to consider arguments directed to showing that claimed subject matter would have been obvious were court to reverse ground of rejection actually made.

3. Patentability — New use or function — Composition of matter (§31.555)

Terms merely setting forth intended use for, or a property inherent in, an otherwise old composition do not differentiate claimed composition from those known to prior art; court does not mean to imply that terms which recite intended use or a property of a composition can never be used to distinguish a new from an old composition; however, assuming their compliance with definiteness requirement of second paragraph of 35 U.S.C. 112, such terms must define, indirectly at least, some characteristic not found in old composition.

4. Construction of specification and claims — Broad or narrow — In general (§32.101)

Claims are given broadest reasonable interpretation during prosecution of patent application.

5. Court of Customs and Patent Appeals — Briefs (§28.05)

Attorney's argument in a brief cannot take the place of evidence.

Particular patents—Composition Pearson, Novel Compositions and Methods of Use, claims 76, 83, and 86 of application allowed; claims 59 to 75, 77 to 79, 84, and 85 refused.

Appeal from Board of Appeals of the Patent Office.

Application for patent of Melton T. Pearson, Serial No. 801,855, filed Feb. 24, 1969; Patent Office Group 124. From decision rejecting claims 59 to 79 and 83 to 86, applicant appeals. Affirmed as to claims 59 to 75, 77 to 79, 84, and 85; reversed as to claims 76, 83, and 86.

GEOFFREY R. MYERS and MOORE & HALL, both of Washington, D. C., for appellant; JOSEPH F. NASSAKONA (Fred E. McKEELVEY of counsel) for Commissioner of Patents. Before MAHNEY, Chief Judge, RICH, LANE, and MILLER, Associate Judges, and ALMOND, Senior Judge.

Appellant brings this appeal from a decision of the Patent Office Board of Appeals that at-

firmed the examiner's rejection of claims 59-79 and 83-86 in his application, entitled "Novel Compositions and Methods of Use." The parties have submitted the case on the record and briefs. We affirm in part and reverse in part.

The Invention

Appellant's invention relates to a composition and its use to inhibit the formation of "pops" and "unsound kernels" during the growth of a peanut crop. According to the record, the term "pops" refers to peanut shells in which no peanut has developed at maturity. By contrast, the term "unsound kernel" is used to describe the condition in which the peanuts that do develop within the shell are small and malformed. An extensive occurrence of either defect significantly reduces the value of a peanut crop.

An adequate summary of the prior art method for avoiding pops and unsound kernels is set forth in the following extract from appellant's specification:

Although the exact biological reason for the formation of "pops" and unsound kernels is not known at the present time, it was known as early as 1800 that if the earth surrounding a peanut plant is treated with some form of calcium-containing compound the problem of "pop" and unsound kernel formation could be materially reduced. In recent years this land treatment has been refined to a highly sophisticated degree. Such a treatment is currently referred to by those in the industry as handplastering. Landplastering as used today consists of spreading large quantities of an inorganic calcium salt (e.g., CaO, CaCO₃ and preferably CaSO₄) on the ground surrounding the peanut plant. Experts in the use of this landplaster technique advocate the criticality of both the time and place at which the calcium salt must be applied if the technique is to be effective. Generally speaking, current expert opinion is that to be at least operative and at best, effective, the calcium salt must be applied at early bloom to the soil at the base of the plant in order to insure that calcium is present at the points of pegging when it occurs. This is usually accomplished by applying a 16-inch band of the salt to the soil centered over the plant row. As is well known, "pegging" is a term used in the peanut industry to describe that process which occurs wherein the bloom-shoots of a peanut plant bend downward from their basically upright position and seek entry into the earth to thereby form "pops" in

Serial No. 801,855 filed February 24, 1969 as a continuation-in-part of application Serial No. 748,217 filed July 29, 1968.

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the earth from which peanut pods will grow. Although such handplaster techniques have proved useful in diminishing the problem of "pop" and unsound kernel formation, they do require the use of large quantities of the calcium salt and thus result in high costs. For example, it has been found that in most peanut producing areas, about 500 to 1000 lbs. per acre of the preferred compound gypsum (commercially available CaSO₄, having particle sizes of about 1000 to 200 microns), must be applied to the soil in order to substantially eliminate the formation of "pops" and unsound kernels by handplaster techniques. For most other calcium salts equal or greater amounts per acre are required to achieve the same results.

Appellant's invention, which also involves the use of calcium compounds to reduce the occurrence of pops and unsound kernels, is summarized in the specification as follows:

The basic composition as contemplated by this invention is comprised of a calcium-containing compound of reduced particle size. By reduced particle size is meant, particles having a size of about 20 microns or less, preferably of submicron size. Such basic compositions may be in dust, powder, slurry, or other conventional form. Preferably such compositions also include fungicides, insecticides, herbicides, and mixtures thereof.

The novel techniques as contemplated by this invention generally comprise contacting the foliage of a peanut crop with the above described compositions to thereby reduce the number of "pops" and unsound kernels formed in a particular peanut crop. In most instances, from about 15 to about 80 pounds per acre of a calcium-containing compound having a particle size of about 20 microns or less, preferably of about 2 microns or less, and most preferably of sub-micron size, and preferably from 20 to 75 pounds per acre, are all that is necessary to apply to the foliage of a peanut crop in order to substantially eliminate the problem of "pops" and unsound kernels.

According to the specification, the preferred calcium compound is calcium sulfate (CaSO₄), especially in the form of its naturally occurring dihydrate (CaSO₄·2H₂O) known as gypsum. Composition claim 59 and method claim 75, both of which are reproduced below, are representative of the claims on appeal.

59. An anti-pop and unsound kernel peanut foliage preparation for reducing pops and unsound kernels in peanut plants comprising, as an active ingredient, a calcium-containing compound of a sufficiently small particle size which when applied to the foli-

age of a peanut crop will substantially reduce the formation of pops and unsound kernels.

75. A method of treating a peanut crop comprising applying to the foliage of said peanut crop a sufficient amount of a composition comprised of, as an active ingredient, a calcium-containing compound having sufficiently small particle size to substantially reduce the formation of pops and unsound kernels.

The remaining composition claims add or more limitations. These limitations include requirements that the calcium compound be CaSO₄ and that the average particle size be less than 20 microns, or even submicron (the than 1 micron) in size. Other limitations require that the composition include a glycer ether, lignin sulfonate or fungicide and that the composition have sufficient calcium compound so that it can be applied at the rate of 15-80 pounds per acre.

The method claims closely parallel the composition claims in format in that they specify foliage treatment with a composition generally as set forth in the composition claims. Two of these claims, 84 and 85, require separate consideration. Claim 84 is directed to a method wherein the composition used contains a fungicide.

Claim 85 stands in a somewhat different posture in that it is an attempt to define method of treatment as an improvement to the conventional handplastering process described supra. Claim 85 reads as follows:

85. In the method of treating a peanut plant by applying to the soil at the point of pegging, a layer of a calcium-containing compound, the improvement which comprises, the additional application, but to the foliage of said peanut plant, of a composition containing, as an active ingredient, a calcium-containing compound having a particle size less than about 20 microns such that, upon the application of said active ingredient to the surfaces of the foliage of the peanut plant, said active ingredient is introduced into the structure of said plant, the combined application both to the soil and to the surfaces of the foliage of the peanut plant being in an amount and at a rate per acre of said crop sufficient to reduce the formation of peanut pops and unsound kernel in the peanuts yielded by said crop.

The board reversed the examiner's rejection of method claims which call for applying to the peanut plant a composition wherein either glycer ether or lignin sulfonate is used in combination with the calcium compound.

Opinion
The examiner's rejection of the claims in issue finds its statutory basis in 35 U.S.C. 103

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However, the board interpreted the examiner's reasoning, accurately we think, as setting forth as one ground for the rejection that the claims did not define novel subject matter. The board affirmed the rejection on this ground.

[1] Of course, a rejection such as that sustained by the board would normally be based upon one of the applicable subsections of 35 U.S.C. 102. However, this court has sanctioned the practice of nominally basing rejections on § 103 when, in fact, the actual ground of rejection is that the claims are anticipated by the prior art. See *In re Dailley*, 479 F.2d 1398, 178 USPQ 293 (CCPA 1973). The justification for this sanction is that a lack of novelty in the claimed subject matter, e.g., as evidenced by a complete disclosure of the invention in the prior art, is the "ultimate or epitome of obviousness." *In re Kahn*, 54 CCPA 1466, 1470, 378 F.2d 959, 962, 154 USPQ 10, 12 (1967).²

[2] The solicitor suggests that we resolve this case by first determining whether the claims define novel subject matter and, if one or more do, then determine whether an obvious subject matter is set forth.³ In order to facilitate our discussion of these questions, we shall separately consider the merits of the rejection as applied to the composition and method claims.

The Composition Claims

The board interpreted the composition claims as reading on compositions that include a calcium compound of small particle size and held that such compositions were described in the prior art. The prior art of record applied against these claims consists of several British patents and a portion of Kirt-Ortner, *Encyclopedia of Chemical Technology*, John Wiley and Sons, N.Y. (1964). There is no need to discuss this prior art in view of the following admission by appellant and summary of his position taken from his brief before the board and main brief in support of this appeal:

Appellant readily admits that calcium containing compounds have been ground to particle sizes within the range of even his

² The record establishes that appellant was fully aware of the ground of rejection being put forth regardless of its *deliberate* basis. Furthermore, the board, in affirming the rejection under § 103, did not in effect make a new rejection under § 102 as occurred in *In re Edvard*, 471 F.2d 632, 176 USPQ 323 (CCPA 1973).

³ Of course, if the only ground for the rejection made under § 103 is that the claims are anticipated, it would be improper to consider arguments directed to showing that the claimed subject matter would have been obvious were we to reverse the ground of rejection actually made. *In re Wiggins*, 418 F.2d 556, 179 USPQ 421 (CCPA 1973).

preferred peanut foliage preparation and that such compounds have often been employed in combination with insecticides, lignin sulphinate and/or glycol ethers. Despite this admission, appellant respectfully submits that, as a matter of law, one cannot ignore the remainder of the limitations in the claims, which limitations render the claims clearly patentable over the art.

In view of this admission, the board considered the claims to be fully met by the prior art. The board reasoned, despite appellant's assertions to the contrary, that terms in the claims such as "for reducing pops and unsound kernels in peanut plants" and "when applied *** will substantially reduce the formation of pops and unsound kernels," do not provide limitations by which the claimed composition is distinguished from those known to the prior art. On this appeal, appellant continues to assert that these and similar terms are limitations which define a novel composition. We disagree.

[3] These terms merely set forth the intended use for, or a property inherent in, an otherwise old composition. As the board pointed out, such terms do not differentiate the claimed composition from those known to the prior art. See *Kropa v. Robt.*, 38 CCPA 858, 187 F.2d 150, 88 USPQ 478 (1951). *In re Lemm*, 51 CCPA 942, 326 F.2d 437, 140 USPQ 273 (1964), and *In re Zierden*, 56 CCPA 1223, 411 F.2d 1325, 162 USPQ 102 (1969).

It seems quite clear to us that one of the compositions admitted to be old by the appellant would not undergo a metamorphosis to a new composition by labeling its container to show that it is a composition suitable for treating peanuts to avoid the formation of pops and unsound kernels. See *In re Lemm*, *supra*. The container would still contain the old composition.

We do not mean to imply that terms which recite the intended use of a property of a composition can never be used to distinguish a new from an old composition. However, assuming their compliance with the definiteness requirements of the second paragraph of 35 U.S.C. 112, such terms must define, indirectly at least, some characteristic not found in the old composition. For example, if calcium compounds of very small particle size had not been known to the prior art, then a term defining the particle as being of a size which "when applied to the foliage of a peanut crop will substantially reduce the formation of pops and unsound kernels" might be capable of distinguishing the new composition from the old.

However, as pointed out above, calcium compositions of small particle size containing the types of additives claimed by appellant

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were known to the prior art. Accordingly, we will affirm the board's decision relative to composition claims 59-74.

The Method Claims

The essence of the board's reasoning in sustaining the rejection of method claims 75-79, 83, 85 and 86 is that, in its view, the claimed process is inherent in the prior art landplastering process. (Claim 84 was treated somewhat differently by the board and will be discussed *infra*.)

The board's conclusion regarding the inherency of the claimed process was based upon two factual determinations with which we are in full agreement. Firstly, it observed, from evidence submitted by appellant, that conventional landplastering compositions typically contain a high percentage (in most cases around 50%) of the calcium compound having a particle size of less than 24 microns. It will be recalled that appellant's specification states that particles of about 20 microns or less are effective in his invention. In one instance, the prior art composition contained nearly 40% of particles of 10 microns or less.

Secondly, the board observed that, in the landplastering process as taught by the prior art, the calcium compound was applied over the leaves of the peanut plant even though the objective was to have as much of it as possible fall to the ground. In view of these facts, the board correctly concluded that the prior art landplastering process would result in the application to peanut foliage of a calcium compound having a particle size of 20 microns or less. In this regard, we think it worth noting, as did the board, that the claims are not written in a way that would exclude the use of a calcium-containing composition having relatively large particles in addition to particles of less than 20 microns in size.

Accordingly, we will affirm the board's decision insofar as it applied to method claims 75, 77, 78, 79 and 85. It may very well be that appellant has made a patentable invention. However, in our view these claims are so broadly written as to read upon the prior art landplastering process. In reaching this decision we have considered the argument made by appellant that claim 85 is intended to read upon a process whereby a foliar application of a calcium composition of small particle size is made subsequent to a conventional landplastering operation. However, we agree with the board that this is but one possible interpretation and that claim 85 can be interpreted as calling for a simultaneous application of a calcium composition to the ground and leaf of the peanut plant and as such reads on the landplastering process.

[4] During the prosecution of a patent ap-

plication, claims are to be given the broadest reasonable interpretation. See *In re Paez*, 56 CCPA 1381, 415 F.2d 1393, 162 USPQ 541 (1969), and *In re Finsterwalder*, 58 CCPA 871, 436 F.2d 1028, 168 USPQ 530 (1971).

We do not agree with the board's decision that claims 76, 83 and 86 define peanut treating processes that are inherent in the landplastering process. Each of these claims defines a process using a calcium composition having particles submicron (less than 1 micron) in size. However, the evidence of record relating to the particle size of compositions sold for use in landplastering operations shows that none of these compositions analyzed contained particles less than 1 micron in size. Furthermore, even though the record does establish that calcium compounds of less than 1 micron in size were known to the prior art, it in no way indicates that these compositions were used to treat peanut plants.

For his part, the solicitor urges that the subject matter of these claims, if not anticipated, would have been obvious. His reasoning is that:

The examiner held *** that it would be obvious to determine the optimum particle size. *** Inasmuch as calcium compounds having a wide variety of particle sizes have been used for appellant's purpose and calcium compounds of submicron size are old, it would be prima facie obvious to use calcium compounds of submicron size for appellant's purpose.

There is no objective evidence, as noted by the examiner, comparing the use of calcium compounds having particle sizes of greater than one micron with those of less than one micron. It follows that appellant has failed to overcome the prima facie case of obviousness made out by the examiner.

We do not agree with the solicitor that the board should be affirmed for these reasons. In our opinion the alleged prima facie case of obviousness was never established. The optimization of particle size would necessarily have been in regard to the landplastering process as known to the art. Of course, the object there would have been to get as much calcium compound as possible on the soil, since the record establishes that it was thought that the calcium had to be taken into the peanut plant from the soil.

Bearing in mind these prior art teachings, we agree with appellant that one skilled in the art would, if anything, go to a larger particle size in order to limit retention on the leaf during the landplastering operation. Accordingly, it was not necessary that appellant present evidence of unexpected results or other facts which might serve to rebut a prima facie case

of abridgements. Therefore, the rejection of claims 76, 83 and 86 is reversed.

Claim 84 was not considered by the board to be inherent in the prior art landplastering process. Instead, the board acknowledged that a combination of a calcium composition and a fungicide was not directly taught in the art related upon by the examiner. However, the board did take notice of the "****" widespread use of soil fungicides, **** and held that it would be at least *prima facie* obvious to apply such a fungicide with a calcium composition during a landplastering operation.

Appellant does not argue that the notice by the board was improper, but urges that the board erred in its conclusion that to use a fungicide in the landplastering operation would be obvious. The argument put forth in the brief in support of this assertion seems to be premised on the notion that the only fungus to which peanut plants are susceptible is a leaf fungus, called leaf spot. Therefore, to admit a fungicide with the calcium composition used in landplastering would, in appellant's view, be a great waste of fungicide since most of it would end up on the ground.

[5] The fatal defect in this argument is that there is no competent evidence which would negate the board's conclusion that the elimination of soil fungi could be the object of one skilled in the art rather than a leaf fungus. Appellant's argument in a brief cannot take the place of evidence. In re Cole, 51 CCPA 919, 358 F.2d 769, 140 USPQ 230 (1964). For this reason, the rejection of claim 84 is affirmed. In summary, the rejection of claims 59-75, 77-79, 84 and 85 is affirmed. The rejection of claims 76, 83 and 86 is reversed.

Court of Customs and Patent Appeals

CONTINENTAL NUT COMPANY v. Le

CORDON BLEU, S.A.R.L.

No. 9251 Decided Apr. 25, 1974

TRADEMARKS

1. Class of goods — Particular cases — Similar (367.2073)

Use of virtually identical marks for gourmet cooking nuts and for name of school of French cooking is likely to cause confusion.

Appeal from Trademark Trial and Appeal Board of the Patent Office, 177 USPQ 734. Trademark opposition No. 51,951 by Le Cordon Bleu, S.A.R.L., against Continental Nut

Company, application, Serial No. 329,696, filed June 11, 1969. From decision sustaining opposition, applicant appeals. Affirmed.

ROBERT H. ECKHART, San Francisco, Calif., and JOHN F. SMITH, Arlington, Va., for appellant. WM. C. MCCOY, JR., and BOSWORTH, SEASONS & MCCOY (FRANK C. HENRY of counsel) all of Cleveland, Ohio, for appellee.

Before MAKEY, Chief Judge, BALDWIN, LANE, and MUNIER, Associate Judges, and WORLEY, Senior Judge.

Appellant, Continental Nut Company, seeks registration of "CORDON BLEU" as a trademark for edible shelled nuts.¹ Appellee, Le Cordon Bleu, S.A.R.L., a French corporation, opposes on its registrations of "LE CORDON BLEU" for educational services—namely, courses and lectures in cooking and oenology;² and for magazines relating to culinary, gastronomic, and oenologic matters.³ The Trademark Trial and Appeal Board sustained the opposition on the basis of a likelihood of confusion.⁴ The parties have submitted the case on the record and briefs. We affirm.

Appellant seeks to avoid the board's holding of likelihood of confusion by relying on the fact that it is the owner of the prior incontestable registration of "BLUE RIBBON" for "shelled and unshelled edible nuts."⁵ Relying on Morehouse Manufacturing Corporation v. J. Strickland and Company, 56 CCPA 946, 407 F.2d 881, 160 USPQ 715 (1969), appellant asserts it has a "right" to register the foreign equivalent of its registration for the same goods. In the aforementioned case, Morehouse opposed Strickland's application for registration of "Blue Magic" for "processing oil" and petitioned for cancellation of Strickland's registration of the same mark for "hair dressing," which was "the same product." In finding for Strickland in both proceedings, the court commented that "the board took the proper approach in first determining the cancellation and then dismissing the opposition, on the basis of the cases relied on, for the reason that the opposer cannot suffer legal damage from the additional registration, over and above any damage it may suffer from the existing registration."

¹ Serial No. 329,696 filed June 11, 1969 alleging first use in commerce as June 5, 1969.

² Reg. No. 786,551, registered March 9, 1965.

³ Reg. No. 786,430, registered March 9, 1965.

⁴ Reported at 177 USPQ 734 (TTAB 1973).

⁵ Reg. No. 717,280, registered June 20, 1961, at 177 USPQ 734 (TTAB 1973).

The board here agreed that "Cordon Bleu" can be translated literally as "Blue Ribbon" but it did not consider that controlling, stating at page 735:

What does "Cordon Bleu" really mean to the American public and what does "Blue Ribbon" mean? The French term is not so unusual to the American public because it is defined in American dictionaries. Frank & Wagnall's New Standard Dictionary of the English Language defines that term as "the blue ribbon of the order of the Holy Ghost, the highest order of the old French monarchy," and as "a person regarded as entitled to a badge of eminent distinction; specifically, a first class cook, particularly a woman cook." Webster's Third New International Dictionary, 1965, similarly defines the term "Cordon Bleu" and indicates the applicability of said term to a cook of great skill.

The term "Blue Ribbon" figuratively refers to an honor or award gained for prominence and, literally, signifies a blue ribbon awarded the first place winner in a competition. See: The American College Dictionary, 1970; Webster's World Dictionary of the American Language, 1966; Webster's Seventh New Collegiate Dictionary, 1959; Funk & Wagnall's New Standard Dictionary of the English Language, supra; and Webster's Third New International Dictionary, supra.

On the basis of dictionary definitions, we are of the opinion that "Blue Ribbon" and "Cordon Bleu" would not leave the same significance to the American public and that the marks "BLUE RIBBON" and "CORDON BLEU" create different commercial impressions.⁶ We conclude, therefore, that the ownership of a registration of "BLUE RIBBON" for edible nuts does not preclude opposer from asserting damage resulting from the registration of "CORDON BLEU" for edible nuts.

Turning to the question of likelihood of confusion the board said at page 736:

While it is true that applicant seeks registration of its mark for edible nuts whereas opposer's mark is registered for a service and a magazine, it is apparent from the record that both parties direct their efforts to the same type of people—those interested in fine cooking. It is further apparent that those interested in French cooking are aware of the reputation of "Le CORDON BLEU" as a cooking school. While such persons may well be aware that opposer

does not sell goods in the United States, they may logically assume that a famous cooking school will endorse certain products. If such a product is sold under a mark identical to or substantially identical to opposer's service mark, such persons would well assume that the product has opposer's sanction or approval. In this particular case, the marks are virtually identical, and since applicant's mark is for an edible product described as "gourmet cooking nuts," the public may readily come to the conclusion that applicant's edible nuts are endorsed by the well-known school of French cooking, "Le CORDON BLEU."

We agree with the board that the Morehouse case does not preclude appellee from asserting that damage would result from granting appellant a registration of the mark "CORDON BLEU." That mark is not essentially the same as appellant's previously registered mark, as was the case in Morehouse.⁷ Moreover, appellant has not demonstrated that the board erred in finding "CORDON BLEU" has a significance to the American public distinct from that of "BLUE RIBBON."

[1] The case turns then on the question of likelihood of confusion. On that point, we find no reversible error in the board's reasoning quoted above. The decision of the board is affirmed.

Court of Customs and Patent Appeals

CONTINENTAL NUT COMPANY v. CORDON BLEU, LTD.

No. 74-529 Decided Apr. 25, 1974

TRADEMARKS

1. Class of goods — Particular cases — Similar (367.2073)

Use of same mark on edible shelled nuts and on canned meat products adapted for use as spreads is likely to cause confusion.

Appeal from Trademark Trial and Appeal Board of the Patent Office, 180 USPQ 205.

¹ The record in Morehouse reveals that the mark shown in the Strickland application had a star over the "J" in "Wagtail" instead of the two stars in its registration.

² See the case of Continental Nut Company v. Cordon Bleu Limited, P.A. 74-529, 181 USPQ 647, decided this date.

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Taylor v. Quebecanux

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competition is confusion of the public. *O'Hara v. Lance*, 77 Ariz. 84, 267 P.2d 725 (1954); *V. J. Doyle Plumbing Co. v. Doyle*, 120 Ariz. 130, 584 P.2d 594, 201 USPQ 871 (App. 1978). If such confusion exists, the relevant inquiry is whether the name taken by a defendant has previously come to indicate the plaintiff's business. *Boice v. Stevenson*, 66 Ariz. 308, 187 P.2d 648 (1947).

[2] A review of the record indicates the Taylors did business under several variations on the Taylor's Equipment Rental theme; however, for the purposes of unfair competition it is not particularly important that in the past the Taylors failed to adopt a single identity for their business to the exclusion of all others. Indeed it is not the name which is protected at all, but the business. *Bank of Arizona v. Arizona Central Bank*, 40 Ariz. 320, 11 P.2d 933 (1932).

Among others, such variations included Taylor's Equipment Rental & Welding, Taylor's Welding & Equip. Rental, and Taylor's Equipment Rental and Welding Repair.

In their brief appellants argue "secondary meaning" at length, however, even if the issue was

[3] With these legal precepts before us we also recognize that ultimately unfair competition is a question of fact. *Boice v. Stevenson*, supra. This case turns not on the fact that the Taylors established a particular name in connection with their business but on the fact that the Quebecanux have appropriated a name for their endeavor which is deceptive and causes confusion among the public. The name taken by the Quebecanux has resulted in misdirected mail, equipment returned to the wrong store, misdirected customers, and the inescapable conclusion to the people in and around Show Low that "Lew" and "Blanche" Taylor are somehow associated with the Quebecanux business. The result is that years of good will, earned solely by the Taylors' efforts, would be usurped by the Taylor Rental Center if the Quebecanux are allowed to perpetuate the confusion caused by the name they have sought to use in their business.

The order and partial judgment of the trial court are affirmed.

affirmed to the decision in this case, appellant is precluded from raising the issue for the first time in this court. See *City of Yuma v. Evans*, 85 Ariz. 229, 350 P.2d 135 (1959).

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Court of Customs and Patent Appeals

In re Tuominen

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In re Tuominen

No. 81-590
Decided Feb. 25, 1982

PATENTS

1. Construction of specification and claims — Broad or narrow — In general (§32.101)

Claims are given broadest reasonable interpretation consistent with specification.

2. Patentability — Composition of matter (§31.50)

Patentability — New use or function — In general (§31.55)

Difference in use cannot render claimed composition novel.

Particular patents — Sunscreen Composition

Tuominen Composition of Matter, rejection of claims 1 and 2 affirmed.

Appeal from Patent and Trademark Office Board of Appeals.

Application for patent of Francis W. Tuominen, Serial No. 865,081, filed June 22, 1981. From decision rejecting claims 1 and 2, appellant appeals. Affirmed; Miller, Judge, dissenting with opinion.

Forrest L. Collins, Minneapolis, Minn., for appellant.

Joseph F. Nakamura and Fred W. Shering for Patent and Trademark Office.

Before Markay, Chief Judge, and Rich, Baldwin, Miller, and Nies, Associate Judges.

Baldwin, Judge.

This is an appeal from a decision by the United States Patent and Trademark Office Board of Appeals (board), sustaining the examiner's rejection under 35 USC 102 of claims 1 and 2. We affirm.

The Invention

Appended claim 1 is directed to, a "sunscreen composition containing as an active ingredient tocopherol acetylsalicylate" (TA), while appended claim 2 recites a TA as the active ingredient. Tuominen discloses a single example of the claimed sunscreen composition, a 10% oleo-

ated solution of a TA (1%) in a mineral oil carrier.

Prior Art

The board affirmed the examiner's rejection of the appended claims as being fully met by each of three references. The first is an abstract of a 1971 Japanese patent disclosing a procedure for synthesizing TA which is described as an analogic agent "which did not harm the stomach." The second reference cited by the examiner is an abstract of a 1975 Japanese journal article that discusses the hydrolysis and lymphatic absorption of twelve "tocopheryl esters," including "tocopheryl acid succinate."

The third reference, a French patent (Boumon), was submitted to the PTO by Tuominen after the first office action. Boumon discloses a composition of TA and, in addition, discloses that a "therapeutic composition" including TA and a "physiologically acceptable excipient" is useful in the prevention and treatment of "various thromboses."

The Proceedings Below

In sustaining the examiner's rejection, the board relied on *In re Pearson*, 499 F.2d 1399, 181 USPQ 641 (CCPA, 1974), for the proposition that patentability of a known composition cannot be predicated solely on a claim preamble setting forth a use for the composition that is not suggested by the prior art. Thus, the board stated that:

"The composition is the same no matter what its intended use is and, consequently, the appended claims are not seen to distinguish over the art which also discloses a composition of the recited active ingredient. We will not construe the instant claims to be limited to compositions also containing other ingredients usually utilized in sunscreen compositions merely by the fact that the introductory clause of the claims recite a different contemplated utility for the claimed composition not taught by the art. Rather, as done by the Examiner, we interpret the claims to be drawn to a composition of the active ingredient, per se, and, as such, under the rationale of *Pearson*, they fail to distinguish over the references."

Nakamura, et al., CHEM. ABST. 74, 3410x (1977).

Nakamura, et al., CHEM. ABST. 84, 2570g (1976).

C. Boumon, French patent No. 2,314,722, published January 14, 1977, for "Method for Preparing Astringent Salicylate from Tonal and the L-Ascorbic Acid."

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Contrary to the board's findings, Tuominen contends that the recitation of "sunscreen composition" in the preamble of each of the appealed claims limits those claims to a combination of TA and additional ingredients typically found in sunscreen compositions, rather than to TA alone. Thus interpreted, however, Tuominen's claims read upon a mixture of TA and, among others, a physiologically acceptable carrier suitable for topical use. Therefore, they are anticipated by Bohuon's disclosure of a composition including TA in association with a physiologically acceptable carrier. See *In re Schaumann*, 572 F.2d 312, 316 & n.10, 197 USPQ 5, 8 & n.10 (CCPA 1978); *In re Petering*, 49 CCPA 993, 1000, 301 F.2d 676, 681, 133 USPQ 275, 280 (1962).

[2] Consequently, even if "sunscreen composition" is read as Tuominen urges, the claimed composition is not limited to exclude a composition within the teachings of Bohuon. The only distinction to which Tuominen can aver is a difference in use, which cannot render the claimed composition novel. See *In re Pearson*, 494 F.2d 1399, 1403, 181 USPQ 641, 644 (CCPA 1974); *In re Zierden*, 56 CCPA 1223, 1226-27, 411 F.2d 1325, 1328-29, 162 USPQ 102, 104-05 (1969).

Therefore, the decision of the board is *affirmed*.

Affirmed.

Müller, Judge, dissenting.

I respectfully dissent from the holding in the majority opinion that Tuominen's claims are anticipated by Bohuon's general disclosure of TA in association with a "physiologically acceptable excipient."

All words in a patent claim, whether in the preamble or the body of the claim, may have patentable significance. There is no statutory justification for ignoring one part of a claim while giving weight to another.

Rather, the entire claim should be considered to determine the "subject matter" which the applicant regards as his invention. See 35 USC 112.

The majority opinion correctly states that the claimed composition "is a mixture of TA and one or more other compounds." TA is known in the prior art, as are mixtures of TA and some other compounds. Because we must determine whether the claimed invention is identically disclosed in any of the references before us, the critical inquiry is what "other compounds" are encompassed by Tuominen's claim and whether any of them are shown by the references. In *In re Pearson*, relied upon by the majority opinion, this court stated:

We do not mean to imply that terms which recite the intended use or a property of a composition can never be used to distinguish a new from an old composition. However, assuming their compliance with the definiteness requirement of the second paragraph of 35 USC §112, such terms must define, indirectly at least, some characteristic not found in the old composition.

494 F.2d at 1403, 181 USPQ at 644.

In the present case, the term "sunscreen composition" is clearly a limitation of the claims and is the only limitation of the "other compounds." In accordance with *In re Pearson*, supra, it is necessary to determine whether "sunscreen composition" defines, indirectly at least, some characteristic of the "other compounds" not found in the references. If "sunscreen composition" is given the interpretation urged by Tuominen and supported by the specification, the "other compounds" must be suitable for topical application and must be of the type commonly found in sunscreen compositions. Even if "sunscreen composition" is given a broader interpretation, the "other compounds" must render the composition suitable for application to a surface to be protected from the sun. For example, combinations of TA with starch, silica, sugar, or gum arabic would not reasonably be considered "sunscreen compositions." It is uncontested by the PTO that none of the references discloses a sunscreen utility for compositions including TA as one ingredient, and Tuominen asserts that the prior art compositions are unsuitable for use as sunscreen compositions.

It is clear from the quoted language that *In re Pearson* does not stand for the proposition for which it is cited in the majority opinion.

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The majority opinion correctly states that Tuominen's claims read upon a mixture of TA and a physiologically acceptable carrier suitable for topical use. However, its conclusion, that the claims are, therefore, anticipated by Bohuon's disclosure of TA with a physiologically acceptable excipient, is a non sequitur, because Bohuon says nothing about topical application. Indeed, the majority opinion raises an issue which was not raised below, to which Tuominen has had no opportunity to respond, and amounts to a new rejection made for the first time on appeal. The majority opinion merely assumes that excipients for drugs taken internally are "carriers suitable for topical application." In *re Schaumann* and *In re Petering*, cited in the majority opinion to justify its holding of anticipation, are not applicable to the facts of this case. Those cases involved generic formulas with a small number of possible substituents individually disclosed in Markush format. In *Petering*, this court held that each of the 20 possible species was disclosed "as fully as if [the parent] had drawn each structural formula or written each name." 49 CCPA at 1000, 301 F.2d at 682, 133 USPQ at 280. On the record before us, the undefined generic term "excipient" includes an unknown number of species having unknown properties, and because this point has not been addressed by the parties, it is unknown what a person of ordinary skill in the art would have understood the term to mean.

Court of Appeals, Fifth Circuit

Sun-Fun Products, Inc.

v. Suntan Research & Development Inc.

No. 79-2719

Decided Sept. 17, 1981

TRADEMARKS

1. **Infringement — Tests of (§§67.439)**

Governing standard in trademark infringement actions is likelihood of confusion.

2. **Identity and similarity — How determined — In general (§§67.4051)**

Whether two marks are likely to be confused depends upon amalgam of factors; among these factors are type of trademark,

similarity of design, similarity of product, identity of retail outlets and purchasers, similarity of advertising media used, defendant's intent, and actual confusion; other factors include previous contractual or business relations between parties, and degree of care purchasers are likely to exercise when selecting products of type sold by parties.

5. **Identity and similarity — How determined — In general (§§67.4051)**

Two marks must bear some threshold resemblance in order to trigger inquiry into extrinsic factors; but this threshold is considerably lower than degree of similarity required where plaintiff presents little or no evidence on extrinsic factors supporting infringement; evaluation of factors other than degree of similarity is necessary because it is difficult to assess degree of similarity in vacuum; all surrounding circumstances should be scrupulously explored in assessing likelihood of deception occasioned by use of trademark in question, equally as significant as general appearance of trademarks is their use in public market, their effect upon dealers, purchasers, and other competitors, relationship of trademark's owners, such as whether they meet with competing articles in competing markets, how they develop their business, and whether they are acting bona or mala fide.

4. **Identity and similarity — How determined — Discerning marks (§§67.4053)**

Similarity of design stems from overall impression conveyed by mark and not dissection of individual features.

3. **Infringement — Knowledge or intent (§§67.437)**

Evidence of intentional deception carries special weight in calculus of determining likelihood of confusion; proof that defendant chose mark with intent of copying plaintiff's mark, standing alone, may justify inference of confusing similarity.

6. **Marks and names subject to ownership — Descriptive — Misdescriptive or not descriptive — Particular marks (§§67.5078)**

"Native Tan," for suntan preparations, arguably has many of indicia of suggestive mark and is therefore entitled to protection.

7. **Identity and similarity — How determined — In general (§§67.4051)**

Past supplier-distributor relationship between plaintiff and precedent of defendant